

REMARKS

Applicant respectfully requests reconsideration of the present application in view of the foregoing amendments and in view of the reasons that follow.

Status of Claims:

Claims 1-10 are currently being cancelled.

Claims 11-24 are currently being added.

No claims are currently being amended.

This amendment adds and cancels claims in this application. A detailed listing of all claims that are, or were, in the application, irrespective of whether the claims remain under examination in the application, is presented, with an appropriate defined status identifier.

After adding and canceling the claims as set forth above, claims 11-24 are now pending in this application.

Claim Objections:

In the Office Action, claims 1-8 and 10 were objected to because claims 1 and 10 do not properly differentiate the communication means. Due to the cancellation of claims 1-10, this objection is now moot.

Drawing Objections:

In the Office Action, the drawings were objected to because “the claimed controllers must be shown or the feature(s) canceled from the claim(s).” Due to the cancellation of claims 1-10, and whereby the new claims 11-24 do not recite “controllers”, this objection is now moot.

Claim Rejections – Prior Art:

In the Office Action, claims 1-7, 9 and 10 were rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 6,437,871 to Yuki; and claim 8 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Yuki in view of U.S. Patent No. 6,885,469 to Tanimoto. These rejections are traversed with respect to new claims 11-24, for at least the reasons given below.

The present invention according to independent claims 11 and 18 is directed toward the effective use of a second communication unit for management of an image forming

apparatus. The second communication unit is generally provided in order to obtain data for printing from an external computer. Thus, a control section is configured to confirm availability of a communication channel between the second communication unit and a computer, upon occurrence of an abnormality in the communication between a management server and a first communication unit, and to cause intra-apparatus information to be forwarded to the management server via the computer. These features make it possible to improve the reliability of the management of the image forming apparatus, without requiring additional hardware.

Yuki discloses a facsimile apparatus having a plurality of communication means (PSTN, ISDN, LAN adaptors) which are provided for the same purpose, that being transmission of image data. See Abstract of Yuki. Yuki teaches a technique of changing one of a plurality of communication means which has failed to establish communication, to another communication means whose communication cost is cheapest of the remainder of the plurality of communication means. See Abstract of Yuki. Since the communication cost is managed in the facsimile apparatus, changing of the communication means have no relation to improvement in the reliability of the management of such a system. Therefore, Yuki is not relevant to the technical concept of the present invention in which a communication unit for a computer is effectively used to improve the reliability of the management.

With respect to features recited in the claims, Yuki does not disclose or suggest causing intra-apparatus information to be forwarded to a management server via a computer, when an abnormality in the communication between the management server and a first communication unit occurs. Note also that a management server performs the managing of communication channels for an image forming apparatus in new claim 11, whereas an image forming apparatus performs its own managing of communication connections in the system of Yuki.

Tanimoto also does not teach or suggest the technical concept of the present invention in which a communication unit for a computer is effectively used to improve the reliability of the management, whereby Tanimoto does not rectify the above-mentioned deficiencies of Yuki.

Accordingly, new independent claims 11 and 18 are patentable over the cited art of record.

Furthermore, with respect to dependent claims 16 and 23, those claims recite a third communication unit that performs facsimile transmission, whereby the control section *confirms availability of the communication channel between the third communication unit and the management server in a higher priority than that of the communication channel between the second communication unit and the computer, upon occurrence of abnormality in the communication between the management server and the first communication unit, to convert the intra-apparatus information into an image of a two-dimensional bar code or characters, and to cause the image to be subjected to facsimile transmission to the management server.* Such features are not taught or suggested by the Yuki or by Tanimoto.

Still further, with respect to dependent claims 17 and 24, those claims recite that the control section is configured to *perform a guidance display relating to a contact with a service center or a check on the connection between the computer and the second communication unit, in a case where both of the communication channel between the second communication unit and the computer and the communication channel between the third communication unit and the management server are unavailable.* Such features are not taught or suggested by the Yuki or by Tanimoto.

Conclusion:

Since all of the issues raised in the Office Action have been addressed in this Amendment and Reply, Applicant believes that the present application is now in condition for allowance, and an early indication of allowance is respectfully requested.

The Examiner is invited to contact the undersigned by telephone if it is felt that a telephone interview would advance the prosecution of the present application.

The Commissioner is hereby authorized to charge any additional fees which may be required regarding this application under 37 C.F.R. §§ 1.16-1.17, or credit any overpayment, to Deposit Account No. 19-0741. Should no proper payment be enclosed herewith, as by a check or credit card payment form being in the wrong amount, unsigned, post-dated, otherwise improper or informal or even entirely missing, the Commissioner is authorized to charge the unpaid amount to Deposit Account No. 19-0741. If any extensions of time are needed for timely acceptance of papers submitted herewith, Applicant hereby petitions for such extension under 37 C.F.R. §1.136 and authorizes payment of any such extensions fees to Deposit Account No. 19-0741.

Respectfully submitted,

Date September 17, 2007
(Monday)

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